Give the birth dose . . .

Hepatitis B vaccine at birth saves lives!

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On October 17, 2001, the Advisory Committee on Immunization Practices (ACIP) voted to recommend a birth dose of hepatitis B vaccine for all U.S. infants. (Only for infants of mothers whose HBsAg test is assured to be negative does ACIP now approve giving the first dose as late as two months of age.)

The following article is adapted from an open letter to ACIP, American Academy of Pediatrics, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, National Medical Association, and other medical professional organizations.

The birth dose recommendation for hepatitis B is published by CDC, AAP, and AAFP in the "Recommended Childhood Immunization Schedule–U.S., 2002."

To obtain a copy, visit www.cdc.gov/mmwr/preview/mmwrhtml/mm5102a4.htm

The Immunization Action Coalition (IAC) urges all health professionals and hospitals to protect all infants from hepatitis B virus (HBV) infection by administering the first dose of hepatitis B vaccine to every infant at birth and no later than hospital discharge.

Approximately 19,000 women with chronic hepatitis B infection give birth in the United States each year. Ninety percent of perinatal infections can be prevented by postexposure prophylaxis given within 12 hours of birth. Tragically, many babies are exposed to HBV at birth but do not receive appropriate postexposure prophylaxis.

Because thimerosal has been removed from all pediatric hepatitis B vaccines in the United States,

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concerns about thimerosal should no longer be an obstacle for practitioners in enacting a universal birth dose policy.

Why is such a policy necessary? Following are some of the ways infants who are not vaccinated at birth become infected:

- The pregnant woman is tested and found to be hepatitis B surface antigen (HBsAg) positive, but her status is not communicated to the newborn nursery. The infant receives neither hepatitis B vaccine nor HBIG protection at birth.
- A chronically infected pregnant woman is tested but with the wrong test, HBsAb (antibody to hepatitis B surface antigen), instead of HBsAg. This is a common mistake since these two test abbreviations differ by only one letter. Her incorrectly ordered test result is "negative," so her doctor wrongly believes her infant does not need postexposure prophylaxis.
- The pregnant woman is HBsAg positive, but her test results are misinterpreted or mistranscribed into her prenatal record or her infant's chart. Her infant does not receive HBIG or hepatitis B vaccine.
- The pregnant woman is not tested for HBsAg either prenatally or in the hospital at the time of delivery. Her infant does not receive hepatitis B vaccine in the hospital, even though it is recommended within 12 hours of birth for infants whose mothers' test results are unknown.
- The woman is tested in early pregnancy for HBsAg and is found to be negative. She develops HBV infection later in pregnancy, but it is not detected, even though it is recommended by CDC that high-risk women be retested later in pregnancy. Because the infection is not clinically detected by her health care provider, her infant does not receive hepatitis B vaccine or HBIG at birth.
- The mother is HBsAg negative, but the infant is exposed to HBV postnatally from another family member or caregiver. This occurs in two-thirds of the cases of childhood transmission.

While there are advantages to giving the first dose at a later well-baby visit, these are advantages of administrative convenience. The primary advantage of giving the first dose at birth is that **it saves lives.**

IAC recently asked hepatitis coordinators at every state health department as well as at city and county CDC projects to express their views about providing hepatitis B vaccine in the hospital. Their responses contained many examples of children who were unprotected or inadequately protected because health professionals failed to order or misordered the hepatitis B blood test or misinterpreted, mistranscribed, or miscommunicated the test results of the children's mothers.

These state coordinators' reports tell us that no matter how well health care providers think they are doing with HBsAg screening of all pregnant women, serious mistakes continue to occur; children are unnecessarily being exposed without the benefit of postexposure prophylaxis, and at least one baby has died. In order to overcome these failures, all 50 state hepatitis coordinators overwhelmingly endorse providing a birth dose.

We must vaccinate every baby in the hospital prior to discharge regardless of the HBsAg status of the mother. Those providers who choose to use hepatitis B-containing combination vaccine, i.e., Comvax, may do so. However, since this vaccine cannot be given at birth, monovalent hepatitis B vaccine must be given at birth and then the hepatitis B vaccine series can be completed with three doses of the combination vaccine. (Giving four doses of hepatitis B vaccine has been shown to be safe in several clinical studies.)

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Hepatitis B vaccine is one of the most effective vaccines available. Studies have shown that infants of the most highly infectious mothers (women who are both HBsAg and HBeAg positive) who receive postexposure prophylaxis with hepatitis B vaccine alone (without HBIG) at birth are protected in 90–95% of cases, essentially the same level of protection afforded by administering hepatitis B vaccine in addition to HBIG. Even higher rates of protection with postexposure prophylaxis have been demonstrated in infants born to less infectious mothers (those who are HBsAg positive and HBeAg negative).

Please read the hepatitis coordinators survey results (see the web address box at left), including descriptions of their experiences with failures of the current system—failures that largely can be prevented by administering hepatitis B vaccine to infants before they go home from the hospital.

Your support for providing a birth dose of hepatitis B vaccine to infants while still in the hospital will protect and save lives that are now being put at risk. ♦

Here's more information about why to give the birth dose

To read the results of IAC's survey of state health department hepatitis coordinators, visit:
www.immunize.org/birthdose/survey.htm

For more information about why all babies should receive the first dose of hepatitis B vaccine in the hospital, go to the Birth Dose page of IAC's website at:
www.immunize.org/birthdose

www.immunize.org/catg.d/p2125.pdf • Item # P2125 (10/02)